

# The Village Crier

national accelerator laboratory

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## PROFESSOR STRUEVER SPEAKS TO NALWO

The hope that the NAL site again will be the locale of an intensive archeological search next summer was expressed by Prof. Stuart Struever, Professor of Anthropology, Northwestern University, in a lecture sponsored by the NAL Women's Organization.

About 100 persons attended Prof. Struever's seminar, held in the NAL Village Barn. It was the first Fall meeting of 1970 for the group, and was preceded by a tea.

Prof. Struever outlined the historical background and the intensive efforts of two students Miss Ann Early and Miss Susan Howser, whom he supervised last summer, in conducting a survey of the NAL grounds for pre-historic sites. He pointed out that "this was the first time in the history of archeology in the Middle West that a small area was given a foot by foot scrutiny by trained observers for artifacts and clues as to the possible location of early life." For weeks the two co-eds walked over portions of the entire 6,800-acre site.



Mrs. Isobel Walker, President, NALWO

Prof. Struever reported that the Summer, 1970, search apparently uncovered some 24 pre-historic sites on the NAL grounds. Of those, he said, it is believed that about 14 belonged to the Archaic period, (the era from about 7,500 B.C. down to about 1,000 B.C. in which man primarily was a hunter-gatherer).

Four more sites were related to the Woodland era, which began about 1,000 B.C. In addition, Struever said, some eight to 10 sites appear to belong to the Mississippian period (800 A.D. to about 1,600 A.D., the beginning of recorded history in this sector).

Prof. Struever pointed out that the opportunities for archeological investigations in the Chicago metropolitan area are diminishing year by year as the earth is being turned over for new homes, highways, and other modern developments. "I am pleased by the Laboratory's interest in its humanistic background," he said.

Prof. Struever was introduced by Mrs. Isobel Walker, President of NALWO. She is the wife of James Walker, Experimental Facilities.

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...Prof. Stuart Struever...





....Professor Struever addresses NALWO group in Village Barn....

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Photo by Tony Frelø, NAL

#### GEORGE DOYLE OFFERS WINTER DRIVING TIPS

With the colder weather approaching, commuters to NAL should be aware of winter driving tips. The following bit of safety advice has been offered by George Doyle, NAL Maintenance, on "the danger of jumping car batteries to get your automobile started." Doyle and his staff stand ready to assist employees having automobile difficulties on the site. Here are Doyle's observations:

Last year Brookhaven National Laboratory's Safety Office reported:

A Laboratory employee attempted to help start a co-worker's car by using battery jumper cables from a Lab truck's battery to the friend's car. At some point of this procedure, the battery in the Lab truck blew up. Very fortunately the explosion did not cause any injuries.

What actually caused the battery to explode in this case is not clear, but it should be remembered that a fully charged battery, or one being charged, generates hydrogen gas. Charging takes place in the car or boat, as well as on a service station or home battery charger. As little as 4% concentration of hydrogen in a mixture with air can be explosive. In addition to flying missiles, the erupting battery acid can cause damage and painful injuries, especially to the eyes and face.

Studies of actual cases indicate the most frequent causes of battery explosions are:

1. Installing a fully charged battery in a vehicle with some of the switches on, or by crossing cables.
2. Fastening cables to a battery post which is broken internally.
3. Filling a warm battery with distilled water, if a source of ignition is present, such as a spark, a burning match, or cigarette.
4. Checking the water level of a battery by aid of light from a match.
5. Connecting or disconnecting of a battery to or from a charger that is turned on.

In general, avoid bringing sources of ignition near batteries and remember that the

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GEORGE DOYLE OFFERS WINTER DRIVING TIPS (Continued from Page 2)

the acid from a battery spill or explosion must be flushed off the flesh immediately with plenty of water. Other than personal injuries, serious damage to a car's alternator may be caused, if the person connecting the jumper wires is careless.

If your car doesn't start at work, call the Maintenance Department for car starting anytime - Extension 421.

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COMPUTER AIDS INFORMATION SYSTEMS GROUP

Since the 1950's, the computer has been an important and developing tool in particle physics research as accelerators have grown in size and energy. Several computers already are being used by scientists to provide data for research programs for the proton synchrotron under construction at NAL.

In addition, a computer is helping to monitor construction of the buildings and other conventional structures of the world's largest scientific research instrument.

The computer tracks the progress of some 12,000 activities ranging from the pouring of concrete for sidewalks to building an enclosure for the ring of bending and focusing magnets in the Main Accelerator that will be one and one-quarter miles in diameter.

"The computer assists us in analyzing conventional construction progress on this project," says John Pollock, Systems Analyst in the office of Information Systems which is located in the Director's Complex in the NAL Village. "We can evaluate data more easily and spot trouble in time to correct it."

NAL staff members, in collaboration with the architect-engineering consortium known as DUSAF, which is concerned with the conventional construction, are using a computer located at the nearby Argonne National Laboratory to store data on construction activities. The data includes time allotted, description, cost and per cent completion of each activity.



....JOHN POLLOCK....

Using a technique called network analysis, analysts match progress against plan, schedule jobs and study the possible effects of any construction problems. DUSAF, in collaboration with its sub-contractors, prepares networks for the conventional construction of the complex accelerator system. NAL then processes and integrates the networks into the overall project network. Every two weeks, the master schedule is updated. Data on each activity is entered into the computer, which uses the project management system to process the information. The computer prints reports showing which jobs have been added and subtracted, start and finish times, percent completion and slippage.

"The computer helps us manage by exception and spot problems quickly, Pollock explained. We can avoid schedule overruns which are costly and determine how slowdowns on one job will affect the entire project. Close analysis of the project would be much more difficult without the computer. Our staff could manually handle a project with a few hundred activities, but not one with 12,000." The computer also uses the cost of each activity on the project to help determine payments to contractors for work as it is completed.

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## SAFARI FROM THE UNITED KINGDOM

Persons interested in science come from many places to visit NAL. Last week, the site was toured by a young married couple and their companion who left London, England, September 7th to tour the world on their self-described "New World Safari Expedition." David Taylor, 27, and John Court, 25, are mechanical engineers and Mrs. Lesley Taylor, 24, is an IBM systems' analyst. The trio plans to work occasionally along the way to finance their three-year-tour. The first major work is to be a film of the Darién Gap, a highway connecting Panama to South America. They shipped a travel-van, personally equipped for extensive camping, to Montreal, where their journey originated.



They said they were quite impressed with NAL and marvelled that U.S. economy permitted such a project. The "Expedition" next will take them to Vancouver, British Columbia, and then to South America, South Africa, India, Southeast Asia and Australia.

...British visitors at NAL: (l to r) David Taylor, Lesley Taylor and John Court...

During their visit to NAL, the group was the guests of Vernon Kenney, general engineer, AEC 200 BeV Facility office. He gave them a complete tour of the site.

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## NAL GYM NIGHT NOVEMBER 4

The next NAL gym night will be held Wednesday, November 4, at the West Chicago Junior High School on Hazel Street. Jim Thompson, Personnel, reports that from 20 to 25 NAL employees have been turning out for basketball, volleyball and general exercise at the gym on the first and third Wednesdays of each month from 6:00 to 9:00 p.m. Basketball or tennis shoes should be worn by all participants to protect the basketball floor and for personal safety.

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REMINDER: Anti-flu shots for NAL employees are being given at the First Aid house at 24 Sauk in the Village by Mrs. Dorothy Poll, R.N., during the month of October.

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## PHONE US ANYTIME NOW

The NAL switchboard now is open around the clock seven days a week, including holidays. The telephone number is 312-231-6600.

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## CLASSIFIED ADS

FOR SALE - Large collection of National Geographic magazines - old - valued at \$75. Will sell for best offer. Call 355-3312.

FOR SALE - '58 Chevy, 348, automatic, new carb. & shocks. Motor is good cond. also transmission is good cond. Call Diana at switchboard or 629-5938.

FOR SALE - Normandy B-flat clarinet w/case. All new pads, excellent condition. \$75.00 or best offer. Please call Spike, Ext. 351.

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